

PATENT CLAIMS 1, 15 (as amended during Chapter II procedure)

1. A method for operating a magnetic logic device (10), wherein at least one output variable  $O = F(I_A, I_B)$  is formed by at least one logic operation from input variables  $(I_A, I_B)$  with an operator function  $F$  of the magnetic logic device (10), wherein
  - the logic device (10) is set at a starting state for executing the operator function  $F$  with a certain operator control signal (SET) before the operation whereby the operator control signal is selected from a group of control signals with which various non-volatile starting states can be set in a controlled manner, each signal being characteristic of a different logic function, characterized in that the magnetic logic device (10) includes one signal magnetic element (11) with two magnetic setting elements (12, 13) which are set with the operator control signal (SET) for executing the operator function  $F$ .
15. A logic device (10) having at least two inputs (14, 15) and at least one output (16), whereby the logic device (10) is provided with at least one logic operation for execution, wherein at least one output variable  $O = F(I_A, I_B)$  is formed from input variables  $(I_A, I_B)$  with an operator function  $F$ , whereby the logic device (10) is connected to a control circuit (20), which is equipped for providing an operator control signal that is selected from a group of control signals with which various non-volatile starting states of the logic device (10) that are characteristic of various logic functions can be set, and for setting the logic device (10) at a starting state corresponding to the operator control signal,

characterized in that  
the logic device (10) comprises one single magnetic  
element (11) having two magnetic setting elements (12,  
13) which are set with the operator control signal  
(SET) for execution of the operator function F.